SENDER WILL CHECK CLASSIFICATION TOP AND BOTTOM

UNCLASSIFIED	CONFIDENTIAL	✓ SECRET

[redacted]

OFFICIAL ROUTING SLIP

TO	NAME AND ADDRESS	INITIALS	DATE
1	OC-E/R&D Lab.	[illegible]	12/23
2	Attn [redacted]		25X1
3	[redacted]	[illegible]	12/ 25X1
4			
5			
6			

	ACTION		DIRECT REPLY		PREPARE REPLY
	APPROVAL		DISPATCH		RECOMMENDATION
	COMMENT		FILE		RETURN
	CONCURRENCE		INFORMATION		SIGNATURE

Remarks:

Gus: please check on a CV-2 to see if it will oscillate when microswitch is actuated

How about Calibration A

FOLD HERE TO RETURN TO SENDER

FROM: NAME, ADDRESS AND PHONE NO.	DATE
OC-O&T/SB/OR	

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(40) PRINTING OFFICE : 1955—O—342531

SECRET

19 December 1957

MEMORANDUM TO THE FILES

FROM: [redacted] 25X1

SUBJECT: Preliminary Operational Evaluation of the CV-2, 6-12 mc/s transistorized converter.

1. The CV-2s, serials #522 and #523, were given a preliminary operational evaluation during the week of 9 December 1957. The chief impediment to any sort of evaluation was the output frequency of the unit: 1500 kc/s; WTOP, 1500 kc/s, 50 KW. The output frequency was changed in one unit, #522, to 1470 kc/s, the closest clear spot in the broadcast band to 1500 kc/s. The other unit, #523, is en route to the R&D Laboratory to have the tuning slug in the output circuitry replaced so that this unit will have a tunable output.

2. Various crystals, selected at random from the Operational Requirements Section 'stock' were used to check the unit over the 6-12 mc/s band. As in the case of the CV-1, the converter performed satisfactorily; keeping in mind that a converter such as this is not expected to compete with a several hundred dollar communications receiver. One point learned from the tests was that it is possible to double with the converter. A crystal of fundamental frequency 4476 kc/s was used to receive [redacted] hellschreiber transmissions on 10417 kc/s. 10417 kc/s - 1470 kc/s = 8947/2 = 4473.5 or approximately 4476 kc/s. Theoretically, then, crystals with a fundamental of from (roughly) 4600 to 5250 kc/s would produce two 1500 kc/s outputs. This effect may necessitate that a calibration or marking system be inscribed about the only tuning control, C1, on the case.

3. The unit oscillates when the micro-switch is depressed without a crystal in the socket. As it does not appear to affect the crystal operation of the unit there is no objection from an operational standpoint to this effect.

4. The units will be given a full evaluation under field conditions when serial #523 has been returned from the R&D Laboratory.

[redacted] 25X1

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